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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,600	10/28/2005	Joachim Kroll	MOS01 P-116	7111
28101 7590 12/03/2007 VAN DYKE, GARDNER, LINN & BURKHART, LLP SUITE 207 2851 CHARLEVOIX DRIVE, S.E. GRAND RAPIDS, MI 49546			EXAMINER ADAMS, GREGORY W	
			ART UNIT 3652	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/534,600

Applicant(s)

KROLL ET AL.

Examiner

Gregory W. Adams

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2 & 19-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fantuzzi (US 5,951,226) (previously cited) in view of Dobner et al. (WO 200071452 A1 (see US case at US 6,698,990)).

With respect to claims 1-2 & 19-23, Fantuzzi discloses a handling facility at a seaport or inner harbor with a container terminal arranged alongside a wharf comprising:

- at least one elevated stacking crane 155 per storage module;
- cross transporters 162 acting independently of each other and able to travel on a different horizontal level transverse to the individual storage modules;
- more than two cross transporters 162 being adapted to move on a same level 154 beneath a transport level of an elevated stacking crane 155 and above truck loading lanes (indicated generally as 16) and on at least one railway (FIG. 67: 161) extending transversely to storage modules into a region of interim storage stations (FIG. 67: A) assigned to each storage module A, each interim storage station being arranged sideways and parallel to railway 161 and forming interfaces between an elevated stacking crane 155 and cross transporters 162. (See also FIG. 67 reproduced below.)

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Fantuzzi does not disclose an interim storage. Dobner et al. discloses interim storage stations 23, 29, e.g. buffer stores, that functionally operate to interface between a cross transporter 31 and stacking cranes while located on a level (indicated generally as 30.1) below stacking cranes. Dobner et al. teach that by virtue of the buffer stores "the arrival rate and service rate of the piece goods which are to be transferred are isolated from one another, with the result that rapid transfer is ensured. The multi-level structural arrangement of the loading installation makes it easier to observe the relevant safety regulations since loading regions and traveling regions for the manual means of transport are precisely demarcated. C2/L5-15. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Fantuzzi to include an interim storage station, as per the teachings of Dobner et al., to improve rapid transfer and safety regulations.

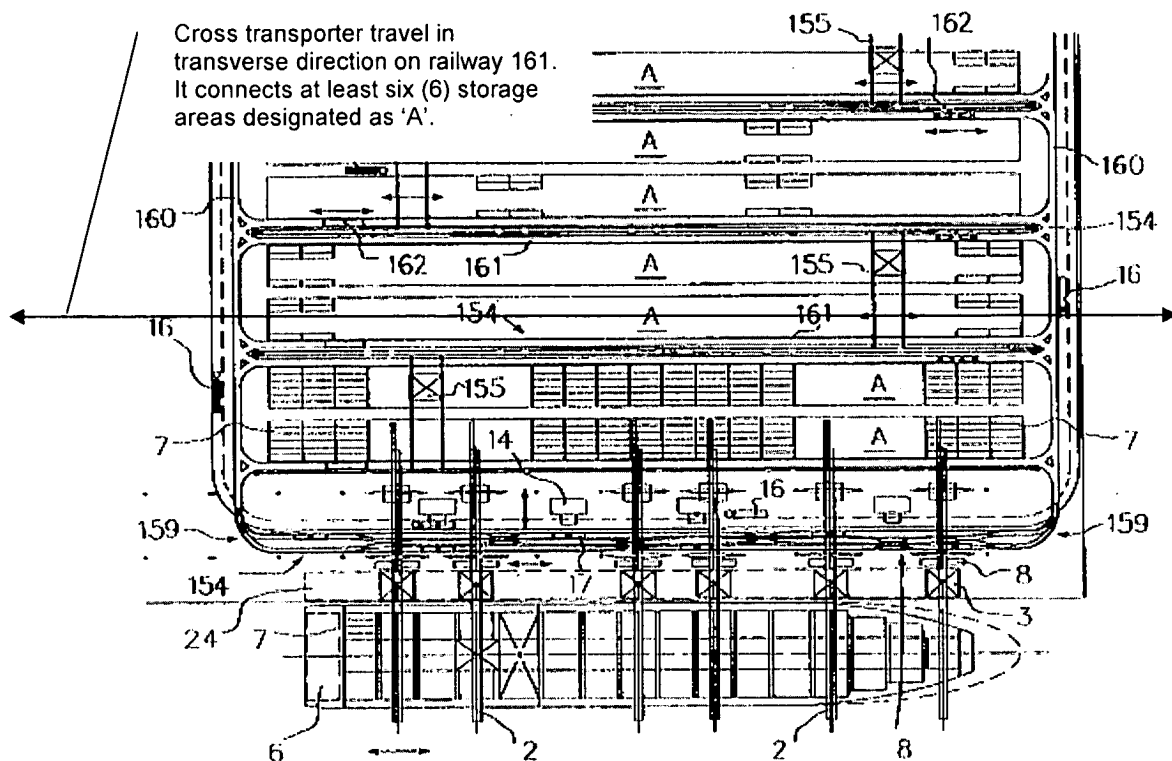


FIG. 67

In response adapting an overhead crane and a cross transporters to load/unload containers from an interim storage location, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In this case, a crane can lift/raise or deposit containers onto Dobner's buffer 23, 29 and either Fantuzzi's transporter or Dobner's transporter can accept containers during transfer by virtue of its horizontal surface. Thus, the cited prior art is clearly functionally able to perform as required in claim 1.

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Claims 3, 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fantuzzi in view of Dobner et al. and Swain et al. (US 4,273,494).

With respect to claims 3, 4, Fantuzzi does not disclose a functionality for a transfer or receiving device that can shifting or traveling into a region transverse to a cross transporter direction of travel. Swain et al. discloses the functionality including a transfer or receiving device that can shift transverse to a cross transporter direction of travel which allows more shifting of substantial weights into storage compared with fork lift type shifters which cannot move the volume much less enter the dense type of storage spaces, e.g. tight confinements. C1. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Fantuzzi to include the functionality including a transfer or receiving device that can shift transverse to a cross transporter direction of travel, as per the teachings of Swain et al., to move incrementally heavier containers into tight spaces.

Claims 5, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fantuzzi in view of Dobner et al., Swain et al. and Quiring (US 6,835,040).

With respect to claims 5, 17, Fantuzzi does not disclose angle brackets or sideways running open slots. Quiring discloses angle brackets and sideways running open slots such that an article for transfer by a cross transporter can be accessed directly by said cross transporter without a partial removal step prior to pick up by said cross transporter. C1. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Fantuzzi to

include angle brackets and sideways running open slots, as per the teachings of Quiring, to reduce a step during cross transport.

Claims 6-12 & 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fantuzzi in view of Dobner et al., Swain et al., Quiring and Iacco (US 3,583,584).

With respect to claims 6-12, 18, Fantuzzi does not disclose a hydraulic piston and cylinder lifting device. Iacco disclose a cross transporter 24 having hydraulic piston and cylinder units 30 particularly suited to handling large cargo containers. C1. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Fantuzzi to include hydraulic piston and cylinder units, as per the teachings of Iacco, to handling large cargo containers in an inventory storage compartment.

Claims 13 & 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fantuzzi in view of Dobner et al. and further in view of Quiring (US 6,835,040).

With respect to claim 13, Fantuzzi does not disclose angle brackets or sideways running open slots. Quiring discloses angle brackets and sideways running open slots such that an article for transfer by a cross transporter can be accessed directly by said cross transporter without a partial removal step prior to pick up by said cross transporter. C1. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Fantuzzi to include angle brackets and sideways running open slots, as per the teachings of Quiring, to reduce a step during cross transport.

Claims 14 & 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fantuzzi in view of Dobner et al., Quiring and Iacco.

With respect to claim 14, Fantuzzi does not disclose a hydraulic piston and cylinder lifting device. Iacco disclose a cross transporter 24 having hydraulic piston and cylinder units 30 particularly suited to handling large cargo containers. C1. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Fantuzzi to include hydraulic piston and cylinder units, as per the teachings of Iacco, to handling large cargo containers in an inventory storage compartment.

With respect to claim 16, Fantuzzi does not disclose a hydraulic piston and cylinder lifting device. Iacco disclose a cross transporter 24 having hydraulic piston and cylinder units 30 particularly suited to handling large cargo containers. C1. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Fantuzzi to include hydraulic piston and cylinder units, as per the teachings of Iacco, to handling large cargo containers in an inventory storage compartment.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fantuzzi in view of Dobner et al. and Quiring.

With respect to claim 15, Fantuzzi does not disclose angle brackets or sideways running open slots. Quiring discloses angle brackets and sideways running open slots such that an article for transfer by a cross transporter can be accessed directly by said cross transporter without a partial removal step prior to pick up by said cross



transporter. C1. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Fantuzzi to include angle brackets and sideways running open slots, as per the teachings of Quiring, to reduce a step during cross transport.

***Response to Arguments***

Applicant's arguments filed Nov. 6, 2007 have been fully considered but they are not persuasive.

In response adapting an overhead crane and a cross transporters to load/unload containers from an interim storage location, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In this case, a crane can lift/raise or deposit containers onto Dobner's buffer 23, 29 and either Fantuzzi's transporter or Dobner's transporter can accept containers during transfer by virtue of its horizontal surface. Thus, the cited prior art is clearly functionally able to perform as required in claim 1. Fantuzzi's rail system comprises elements 161, 158, 159 & 160 which allows transporters 162 to circumvent the entire of the storage modules indicated as A in FIG. 67.

With respect to claims 3-18 & 24, Applicants arguments based on hindsight reasoning are not persuasive. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction

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based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). The references are least analogous for dealing in the art of handling containers between two locations. thus, the combinations are proper.

Quiring clearly discloses L-shaped brackets 40 which provides slots such that overhead transporter 30 can enter said slots to deposit an article.

### **Conclusion**

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory W. Adams whose telephone number is (571) 272-8101. The examiner can normally be reached on M-Th, 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saul Rodriguez can be reached on (571) 272-7097. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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11/26/07

  
SAUL RODRIGUEZ  
SUPERVISORY PATENT EXAMINER